

TORTILIA VIATRIX, new species.

AN AFRICAN MOTH ON SENNA IMPORTED INTO THE UNITED STATES.

By AUGUST BUSCK.

A considerable number of carloads of sacked dry senna leaves (*Cassia* sp.), received from Sudan, Africa, had been stored for 1½ to 3 years in a warehouse in a freight terminal at Hoboken, N. J. In September, 1933, this material was found to be heavily infested by the larvae of a small moth; hundreds of live moths, larvae, and pupae were discovered on or around the sacks; large numbers of dead moths were found on the floor and in corners, indicating that the species had lived and multiplied for several generations in the warehouse.

The infested senna leaves of African origin were packed loosely in burlap sacks; other cargoes of senna received from India were compressed in bales and were apparently not infested. A sample of the leaves and of the burlap covering of the African senna, containing live larvae, was submitted to the writer for identification of the insect. The sample was fairly alive with larvae and about a hundred moths issued during the following week. It was at once realized that the species was not American, and critical examination of its structure proved it to be a new species of the African genus *Tortilia* Chretien (Family Heliodinidae); specimens were sent to the world authority on this group of insects, Edward Meyrick, in England, who promptly confirmed the generic identification and stated that the species was unknown to him.

The genus *Tortilia* was previously known from a single species, *Tortilia flavella* Chretien (Bull. Soc. Ent. France, p. 202, 1908), the larva of which feeds on flowers of *Acacia* in Algiers. *Tortilia flavella* is not known to me except from the description; the present species is clearly very similar not only in structure but also in coloration to the genotype, and their identity is not excluded, but Chretien's careful description differs in several particulars and it would be unwise to assume this identity, notwithstanding the close relationship between the foodplants, *Acacia* and *Cassia*. Chretien reared his species from (presumably fresh) flowers of *Acacia* taken from the tree, while the present species must be considered a stored-product species.

The generic characters of the genus *Tortilia* are as follows: Head smooth; antennae three-fourths the length of fore wing, simple; no ocelli; maxillary palpi absent; labial palpi long, slender, recurved and diverging; second joint slightly thickened, with smooth scales; terminal joint nearly as long as second, smooth, pointed.

Fore wing narrow, elongate, lanceolate, smooth scaled; veins

1b stalked at base, 1c faint, but present in its entire length, emphasized on margin; 2 nearly obsolescent from before angle of cell; 3 strong; 4 absent; cell open between 3 and 5; 6 and 7 stalked, enclosing apex; 8 out of stalk of 6 and 7; 9 connate with stalk; 10 near to 9; 11 absent; 12 strong, furcate at base.

Hind wing less than half as wide as fore wing, costa rounded to basal third, then straight to apex; apex acute; eight veins; 2, 3, 4, 5, and 6 equidistant; cell open between 5 and 6; 7 to costa, just before apex.

The most striking pterogostic character is the loss of vein 11 in the fore wing. Posterior tibiae clothed with long stiff hairs.

The genus is allied to *Stathmopoda* Stainton and even more so to *Erineda* Busck, from both of which it differs in the venation of the fore wings and in the simple antennae.

Tortilia viatrix, new species.

Labial palpi light ochreous, second joint with a thin fuscous shade on outer side, terminal joint with a similar line and with apex fuscous. Face silvery ochreous; head light ochreous; thorax ochreous, more or less heavily overlaid with blackish fuscous. Fore wings light ochreous with rather undefined blackish fuscous markings as follows: base of costa, dorsum, and a few scattered scales on the fold blackish fuscous; a large transverse, ill-defined, black fascia before the middle of the wing, narrower on costa than on dorsum; an outwardly oblique, blackish streak from outer third of dorsum to costa and apex. Cilia light fuscous. Hind wings light silvery fuscous with light fuscous cilia. Abdomen light ochreous. Legs light ochreous, outer sides shaded with fuscous.

The moths at rest sit with the body nearly horizontal, all legs applied to the surface (*not*, as is common in the family, with hind legs raised above the body); antennae raised in a gentle curve above thorax and wings.

Male genitalia with hooked uncus; tip of gnathos deflected; socii and transilla absent; harpes elongate ovate, with apex blunt and dorsal edge sinuate; anellus ring-shaped, triangular in front and embracing the very large, stout truncate aedoeagus, which has a lateral hook near apex; no cornuti.

Female genitalia with simple ostium; ductus short; bursa large, double, and heavily armed with spined signa; ductus seminalis from end of bursa, as is the rule in the family Heliodinidae.

Skin of abdomen minutely spined, with a more conspicuous transverse, dorsal line of short spines on the middle of each segment.

Alar expanse, 9–10 mm.

Habitat.—Sudan, Africa (New Jersey).

Foodplant.—*Cassia* sp.

I am informed that the infested bales of senna have since been fumigated with apparent success and the continued survival and spread of this species in America is not probable, though not necessarily excluded. Its ability to maintain itself for several generations in the warehouse indicates that the climatic conditions would not be the determining factor, and the

species might accommodate itself to other dry stored vegetable matter, but it is more likely that it is attracted only to its special foodplant, *Cassia*, and though this plant genus is represented in America, the chances for the survival of the *Tortilia* seem remote.

EXPLANATION OF PLATE.

Tortilia viatrix Busck.

Fig. 1 and 2. Moth.

Fig. 3. Wing venation.

Fig. 4. Male genitalia with aedoeagus removed.

Fig. 5. Aedoeagus same enlargement as Fig. 4.

Fig. 6. Female genitalia.

Figures 1, 2, and 3 were drawn by Mr. H. Bradford; figures 4, 5, and 6 by Mrs. Eleanor A. Carlin, both of the Bureau of Entomology, United States Department of Agriculture.

MINUTES OF THE 453d REGULAR MEETING OF THE ENTOMOLOGICAL SOCIETY OF WASHINGTON, FEBRUARY 1, 1934.

The 453d regular meeting of the Entomological Society of Washington was held at 8 p. m., Thursday, February 1, 1934, in Room 43 of the new building of the National Museum. Mr. J. S. Wade, president, presided. There were present 8 members and 3 visitors. The minutes of the previous meeting were read and approved as corrected.

Under "Reports of Officers," the Corresponding Secretary-Treasurer reported that approximately one-third of the estimated receipts for 1934 had been received during January. He urged prompt payment of the remaining obligations to the Society.

Mr. Rohwer stated that he had recently received a letter from Dr. Walther Horn of the Deutsches Entomologisches Institut, in which Dr. Horn indicated that, beginning in February, the Institut would issue a publication entitled "Arbeiten über morphologische und taxonomische Entomologie aus Berlin-Dahlem," this publication to take the place of "Entomologische Mitteilungen" which was discontinued in 1928.

Mr. Wade noted that the Recording Secretary, Dr. F. M. Wadley, would be absent from the city for an indefinite period and consequently would be unable to function as secretary of the Society. He also stated that Mr. P. W. Oman had consented to substitute for the present.

Mr. A. B. Gahan recommended the appointment of a committee for resolutions on the death of Dr. Robert W. Shufeldt, a charter member of the Society. A motion was passed that such a committee be appointed by the president.

On motion the following statement was ordered spread upon the minutes of this meeting:

"Major Robert W. Shufeldt, Medical Corps, U. S. Army (retired), recently died in Washington. He was an original member of this Society. Although his fame as a naturalist rests principally on his work on the Osteology of Birds, he